

REMARKS

In the final Office Action dated January 25, 2005, the Examiner objected to Fig. 5 under M.P.E.P § 608.02(g) for failing to include the legend -- Prior Art --; objected to the specification for allegedly including various informalities; rejected claims 9, 17, 20, 24, 30, and 36 under 35 U.S.C. 102(e) as allegedly being anticipated by FEDERKINS et al. (U.S. Patent No. 5,123,014); rejected claims 1-5, 7, 10-13, 15, 18, 19, 21, 22, 25, 26, 28, 29, 31, 32, 34, and 35 under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK (U.S. Patent No. 5,845,085); and rejected claims 6, 8, 14, 16, 23, 27, and 33 under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK and further in view of ANDERSON et al. (U.S. Patent No. 5,369,703 B1)

Claims 1-36 were pending in the present application prior to the above amendments. Claims 1-3, 9, 11, 17, 19, 24, 27, and 30-32 have been amended to improve form. Claims 10, 12, 13, 18, 20-23, 25, 26, and 29 have been canceled without prejudice. No new matter has been added by way of the present amendments. Accordingly, claims 1-9, 11, 14-17, 19, 24, 27, 28, and 30-36 will be pending in the present application upon entry of this Amendment. Reconsideration and allowance of all claims in view of the following remarks is respectfully requested.

Initially, Fig. 5 of the drawings was objected to under M.P.E.P § 608.02(g) for failing to include the legend -- Prior Art --. More specifically, the Examiner indicated that only old or known features are illustrated. Applicants respectfully disagree with the Examiner's position. The 29-bit shift register 120 and exclusive-OR element (EOR) 122 illustrated in Fig. 5 represent exemplary implementations of HDLC descrambler 82 as

more generally shown in Fig. 4. Contrary to any known reference (including the cited "Merchant" reference), such a descrambler embodiment is not known in the art as being connected to HDLC Abort and Flag check 80, as shown in Fig. 5 (as amended in Applicants' previous response dated September 29, 2004). Accordingly, any indication by Applicants that the illustrated embodiment is Prior Art would imply that the relationship between the descrambler elements and the HDLC Abort and Flag check element are also within the Prior Art, which is clearly not the case. In view the above remarks, Applicants respectfully request withdrawal of the pending objection.

The specification was objected to for allegedly including various informalities. More specifically, the Examiner indicated that Applicants' recitation at page 8, line 29 that "HDLC descrambler 82 is an x^{29+1} self-synchronous scrambler" should be accompanied by a reference to the cited Merchant reference. Applicants respectfully disagree with the Examiner's position. Applicants are aware of no law, rule, or regulation in 35 U.S.C, 37 C.F.R., or the M.P.E.P., respectively, that requires applicants to specifically reference the novelty or perceived novelty of each and every element included within each and every disclosed embodiment or to affirmatively designate references relating to potentially known elements. Accordingly, Applicants refrain from incorporating a reference to the Merchant reference within the specification in relation to HDLC descrambler 82.

Claims 9, 17, 20, 24, 30, and 36 have been rejected under 35 U.S.C. 102(e) as allegedly being anticipated by FEDERKINS et al. Applicants respectfully traverse.

Independent claim 9, as amended, recites apparatus for processing data in a data transmitting system. The apparatus includes: a data element for forwarding data for

further processing in the data transmitting system when data is being received and creating idle time synchronizing information during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system and placing the data receiving system in a correct state with respect to whether an inter-frame time fill byte or a data byte is being received, where the idle time synchronizing information includes an alternating sequence of runt abort packets and idle time indication bytes; and a packet processing element for creating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol.

A proper rejection under 35 U.S.C. § 102 requires that a reference teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. See M.P.E.P. § 2131. FEDERKINS et al. does not disclose or suggest the combination of features recited in Applicants' claim 9.

For example, FEDERKINS et al. does not disclose or suggest idle time synchronizing information including an alternating sequence of runt abort packets and idle time indication bytes, as required by claim 9. Although FEDERKINS et al. appears to disclose embedding a timing signal bit sequence during idle time between data messages, the timing signal bit sequences in FEDERKINS et al. are not runt abort packets. Moreover, FEDERKINS et al. requires that seven different timing bit patterns be used at different temporal locations in the transmission. FEDERKINS et al. does not disclose inserting runt abort packets into the idle time between data bytes. Further, FEDERKINS et al. does not disclose the additional feature of the idle time synchronizing information including an alternating sequence of runt abort packets and idle time

indication bytes, as required by claim 9. For at least these reasons, FEDERKINS et al. does not disclose each of the features of claim 9. Accordingly, allowance of claim 9 is respectfully requested..

Independent claim 17, as amended, recites features similar to features recited in claim 9. Therefore, claim 17 is not anticipated by FEDERKINS et al. for at least reasons similar to those given above with respect to claim 9 and allowance of claim 17 is respectfully requested.

Claim 20 has been canceled herewith, without prejudice. Accordingly, withdrawal of the rejection of claim 20 is moot and withdrawal is respectfully requested.

Independent claim 24, as amended, recites features similar to features recited in claim 9. Therefore, claim 24 is not anticipated by FEDERKINS et al. for at least reasons similar to those given above with respect to claim 9. Moreover, claim 24 includes additional features not disclosed or suggested by FEDERKINS et al.

For example, FEDERKINS et al. does not disclose creating a runt abort packet during idle time when the transmitting system is not receiving data, wherein the runt abort packet has a length of less than six bytes. As described above, FEDERKINS et al. does not disclose generating and forwarding runt abort packets when a transmitting system is not receiving data. Further, FEDERKINS et al. does not disclose creating a runt abort packet having a length of less than six bytes. FEDERKINS et al. is completely silent in this regard. For at least this additional reason, claim 24 is considered patentable over FEDERKINS et al.

Independent claims 30 and 36 recites features similar to features recited in claim 9. Therefore, claims 30 and 36 are not anticipated by FEDERKINS et al. for at least reasons similar to those given above with respect to claim 9.

Claims 1-5, 7, 10-13, 15, 18, 19, 21, 22, 25, 26, 28, 29, 31, 32, 34, and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK. Applicants respectfully traverse.

Independent claim 1, as amended, recites a method of processing data in a data transmitting system. The method includes forwarding data for further processing in the data transmitting system when data is being received; generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system; and generating packet information by processing the data and the idle time synchronizing information in accordance with a packet protocol.

A proper rejection under 35 U.S.C. § 103 requires that three basic criteria be met. First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest each and every claim limitation. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The cited combination of FEDERKINS et al. and

GULICK fail to disclose or reasonably suggest the combination of features recited in Applicants' claim 1.

In particular, the Examiner acknowledges that FEDERKINS et al. fails to disclose or suggest generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received (Office Action, pp. 5-6). To remedy this acknowledged deficiency, the Examiner relied on col. 1, lines 61-65 of GULICK for allegedly disclosing runt abort packets (Office Action, pg. 6). Applicants respectfully submit that this section of GULICK do not disclose or suggest generating idle time synchronizing information including at least a runt abort packet during idle time when data is not being received, the idle time synchronizing information for synchronizing a data receiving system with the data transmitting system, as required by claim 1.

At col. 1, lines 61-65, GULICK discloses:

Data frames may be of varying length. The minimum lengths of any data frame is protocol specific, but is usually on the order of 4-6 bytes. If a frame is received by an HDLC receiver with less than the 4-6 bytes required by the system protocol, then a "short frame" is recognized and discarded.

This section of GULICK discloses merely that an HDLC protocol may discard frames less than a predetermined length. This section of GULICK, either alone or in proper combination with FEDERKINS et al. does not disclose or suggest generating a runt abort packet during idle time when data is not being received to synchronize a data receiving system with the data transmitting system. For at least this reason, claim 1 is considered patentable over the cited combination of FEDERKINS et al. and GULICK.

Even assuming, *arguendo*, that GULICK discloses runt abort packets, there is absolutely no suggestion or motivation in GULICK to use the runt abort packets in the

synchronization process of FEDERKINS et al. In making the rejection, the Examiner indicated that "it would have been obvious to modify FEDERKINS et al. to include a preparing a runt abort packet such as that taught by GULICK in order to have a data link controllers [sic] and a receiver for a high-level data-link controller which is capable of performing flag and abort detections, in-frame and out-of-frame determinations, zero-deletions, and several higher level controlling functions" (Office Action, pg. 6). This alleged motivation is merely a conclusory statement and no portion of either reference is pointed to as providing objective motivation for combining FEDERKINS et al. and GULICK. Such motivation does not satisfy the requirements of 35 U.S.C. § 103.

For at least these additional reasons, withdrawal of the rejection and allowance of claim 1 is respectfully requested.

Claims 2-5 and 7 depend from claim 1. Therefore, claims 2-5 and 7 are patentable over the cited combination of FEDERKINS et al. and GULICK for at least reasons similar to those given above with respect to claim 1.

Claims 10, 12 and 13 have been canceled without prejudice herewith. Accordingly, withdrawal of the pending rejection with respect to claims 10, 12, and 13 is respectfully requested.

Claims 11 and 15 depend from claim 9 and recite features similar to features recited in claim 1. Applicants respectfully submit that the disclosure of GULICK does not remedy the deficiencies in FEDERKINS et al. noted above with respect to claim 9. Accordingly, claims 11 and 15 are considered patentable over the combination of FEDERKINS et al. and GULICK for at least the reasons set forth above, with respect to claims 9 and 1.

Claim 18 has been canceled without prejudice herewith. Accordingly, withdrawal of the pending rejection with respect to claim 18 is respectfully requested.

Claim 19 depends from claim 17. Applicants respectfully submit that the disclosure of GULICK does not remedy the deficiencies in FEDERKINS et al. noted above with respect to claim 17. Accordingly, claim 19 is considered patentable over the combination of FEDERKINS et al. and GULICK for at least the reasons set forth above, with respect to claim 17.

Claims 21, 22, 25, and 26 have been canceled without prejudice herewith. Accordingly, withdrawal of the pending rejection with respect to claims 21, 22, 25, and 26 are respectfully requested.

Claim 28 depends from claim 24. Applicants respectfully submit that the disclosure of GULICK does not remedy the deficiencies in FEDERKINS et al. noted above with respect to claim 24, as set forth in detail above. Accordingly, claim 28 is considered patentable over the combination of FEDERKINS et al. and GULICK for at least the reasons set forth above, with respect to claim 24.

Claim 29 has been canceled without prejudice herewith. Accordingly, withdrawal of the pending rejection with respect to claim 29 is respectfully requested.

Claims 31, 32, 34, and 35 depend from claim 30 and recite features similar to features recited in claim 1. Applicants respectfully submit that the disclosure of GULICK does not remedy the deficiencies in FEDERKINS et al. noted above with respect to claim 30. Accordingly, claims 31, 32, 34, and 35 are considered patentable over the combination of FEDERKINS et al. and GULICK for at least the reasons set forth above, with respect to claims 30 and 1.

Claims 6, 8, 14, 16, 23, 27, and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over FEDERKINS et al. in view of GULICK and further in view of ANDERSON et al. Applicants respectfully traverse.

As an initial matter, Applicants assert that the U.S. Patent No. of 5,369,703 for ANDERSON et al. that was provided in the Office Action at page 8 is incorrect or erroneous. The following remarks are based upon an understanding that the instant rejection is based on U.S. Patent 6,263,443 to Anderson et al. and not on U.S. Patent No. 5,369,703 to Archibald et al. Applicants respectfully request withdrawal of the finality of the pending Office Action so that confirmation of this understanding may be provided in a subsequent Office Action.

Claims 6 and 8 depend from claim 1. Applicants respectfully submit that the disclosure of ANDERSON et al. does not remedy the deficiencies noted above with respect to claim 1, as set forth in detail above. Accordingly, claims 6 and 8 are considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 1.

Claims 14 and 16 depend from claim 9. Applicants respectfully submit that the disclosures of GULICK and ANDERSON et al. do not remedy the deficiencies noted above with respect to claim 9, as set forth in detail above. Accordingly, claims 14 and 16 are considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 9.

Claim 23 has been canceled without prejudice herewith. Accordingly, withdrawal of the pending rejection with respect to claim 23 is respectfully requested.

Claim 27 depends from claim 24. Applicants respectfully submit that the disclosures of GULICK and ANDERSON et al. do not remedy the deficiencies noted above with respect to claim 24, as set forth in detail above. Accordingly, claim 27 is considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 24.

Claim 33 depends from claim 30. Applicants respectfully submit that the disclosures of GULICK and ANDERSON et al. do not remedy the deficiencies noted above with respect to claim 30, as set forth in detail above. Accordingly, claim 33 is considered patentable over the combination of FEDERKINS et al., GULICK, and ANDERSON et al. for at least the reasons set forth above, with respect to claim 30.

CONCLUSION

Applicants submit that the application is now in condition for allowance, and notice to that effect is earnestly solicited. Applicants also respectfully submit that the proposed amendments to the claims do not raise new issues or necessitate any additional search of the art by the Examiner.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: April 25, 2005